

THE DEAD ASTRONAUT
By J. G. BALLARD

CAPE KENNEDY has gone now, its gantries rising from the deserted dunes. Sand has come in across the Banana River, filling the creeks and turning the old space complex into a wilderness of swamps and broken concrete. In the summer, hunters build their blinds in the wrecked staff cars; but by early November, when Judith and I arrived, the entire area was abandoned. Beyond Cocoa Beach, where I stopped the car, the ruined motels were half hidden in the saw grass. The launching towers rose into the evening air like the rusting ciphers of some forgotten algebra of the sky.

"The perimeter fence is half a mile ahead," I said. "We'll wait here until it's dark. Do you feel better now?" Judith was staring at an immense funnel of cerise cloud that seemed to draw the day with it below the horizon, taking the light from her faded blonde hair. The previous afternoon, in the hotel in Tampa, she had fallen ill briefly with some unspecified complaint.

"What about the money?" she asked. "They may want more, now that we're here."

"Five thousand dollars? Ample, Judith. These relic hunters are a dying breed – few people are interested in Cape Kennedy any longer. What's the matter?"

Her thin fingers were fretting at the collar of her suede jacket. "I... it's just that perhaps I should have worn black."

"Why? Judith, this isn't a funeral. For heaven's sake, Robert died twenty years ago. I know all he meant to us, but..."

Judith was staring at the debris of tires and abandoned cars, her pale eyes becalmed in her drawn face.

"Philip, don't you understand, he's coming back now. Someone's got to be here. The memorial service over the radio was a horrible travesty – my God, that priest would have had a shock if Robert had talked back to him. There ought to be a full-scale committee, not just you and I and these empty night clubs."

In a firmer voice, I said: "Judith, there would be a committee – *if* we told the NASA Foundation what we know. The remains would be interred in the NASA vault at Arlington, there'd be a band – even the President might be there. There's still time."

I waited for her to reply, but she was watching the gantries fade into the night sky. Fifteen years ago, when the dead astronaut orbiting the earth in his burned-out capsule had been forgotten, Judith had constituted herself a memorial committee of one. Perhaps, in a few days, when she finally held the last relics of Robert Hamilton's body in her own hands, she would come to terms with her obsession.

"Philip, over there! Is that –"

High in the western sky, between the constellations Cepheus and Cassiopeia, a point of white light moved toward us, like a lost star searching for its zodiac. Within a few minutes, it passed overhead, its faint beacon setting behind the cirrus over the sea.

"It's all right, Judith." I showed her the trajectory timetables penciled into my diary. "The relic hunters read these orbits off the sky better than any computer. They must have been watching the pathways for years."

"Who was it?"

"A Russian woman pilot – Valentina Prokrovna. She was sent up from a site near the Urals twenty-five years ago to work on a television relay system."

"Television? I hope they enjoyed the program."

This callous remark, uttered by Judith as she stepped from the car, made me realize once again her special motives for coming to Cape Kennedy. I watched the capsule of the dead woman disappear over the dark Atlantic stream, as always moved by the tragic but serene spectacle of one of these ghostly voyagers coming back after so many years from the tideways of space. All I knew of this dead Russian was her code name: Seagull. Yet, for some reason, I was glad to be there as she came down. Judith, on the other hand, felt nothing of this. During all the years she had sat in the garden in the cold evenings, too tired to bring herself to bed, she had been sustained by her concern for one only of the 12 dead astronauts orbiting the night sky. As she waited, her back to the sea, I drove the car into the garage of an abandoned night club 50 yards from the road. From the trunk I took out two suitcases. One, a light travel case, contained clothes for Judith and myself. The other, fitted with a foil inlay, reinforcing straps and a second handle, was empty.

We set off north toward the perimeter fence, like two late visitors arriving at a resort abandoned years earlier.

It was 20 years now since the last rockets had left their launching platforms at Cape Kennedy. At the time, NASA had already moved Judith and me – I was a senior flight programmer – to the great new Planetary Space Complex in New Mexico. Shortly after our arrival, we had met one of the trainee astronauts, Robert Hamilton. After two decades, all I could remember of this overpolite but sharp-eyed young man was his albino skin, so like Judith's pale eyes and opal hair, the same cold gene that crossed them both with its arctic pallor. We had been close friends for barely six weeks. Judith's infatuation was one of those confused sexual impulses that well-brought-up young women express in their own naive way; and as I watched them swim and play tennis together, I felt not so much resentful as concerned to sustain the whole passing illusion for her.

A year later, Robert Hamilton was dead. He had returned to Cape Kennedy for the last military flights before the launching grounds were closed. Three hours after lift-off, a freak meteorite collision ruptured his oxygen support system. He had lived on in his suit for another five hours. Although calm at first, his last radio transmissions were an incoherent babble Judith and I had never been allowed to hear.

A dozen astronauts had died in orbital accidents, their capsules left to revolve through the night sky like the stars of a new constellation; and at first, Judith had shown little response. Later, after her miscarriage, the figure of this dead astronaut circling the sky above us re-emerged in her mind as an obsession with time. For hours, she would stare at the bedroom clock, as if waiting for something to happen.

Five years later, after I resigned from NASA, we made our first trip to Cape Kennedy. A few military units still guarded the derelict gantries, but already the former launching site was being used as a satellite graveyard. As the dead capsules lost orbital velocity, they homed onto the master radio beacon. As well as the American vehicles, Russian and French satellites in the joint Euro-American space projects were brought down here, the burned-out hulks of the capsules exploding across the cracked concrete.

Already, too, the relic hunters were at Cape Kennedy, scouring the burning saw grass for instrument panels and flying suits and – most valuable of all – the mummified corpses of the dead astronauts.

These blackened fragments of collarbone and shin, kneecap and rib, were the unique relics of the space age, as treasured as the saintly bones of medieval shrines. After the first fatal accidents in space, public outcry demanded that these orbiting biers be brought down to earth. Unfortunately, when a returning moon rocket crashed into the Kalahari Desert, aboriginal tribesmen broke into the vehicle. Believing the crew to be dead gods, they cut off the eight hands and vanished into the bush. It had taken two years to track them down. From then on, the capsules were left in orbit to burn out on re-entry.

Whatever remains survived the crash landings in the satellite graveyard were scavenged by the relic hunters of Cape Kennedy. This band of nomads had lived for years in the wrecked cars and motels, stealing their icons under the feet of the wardens who patrolled the concrete decks. In early October, when a former NASA colleague told me that Robert Hamilton's satellite was becoming unstable, I drove down to Tampa and began to inquire about the purchase price of Robert's mortal remains. Five thousand dollars was a small price to pay for laying his ghost to rest in Judith's mind.

Eight hundred yards from the road, we crossed the perimeter fence. Crushed by the dunes, long sections of the 20-foot-high palisade had collapsed, the saw grass growing through the steel mesh. Below us, the boundary road passed a derelict guardhouse and divided into two paved tracks. As we waited at this rendezvous, the head lamps of the wardens' half-tracks flared across the gantries near the beach. Five minutes later, a small dark-faced man climbed from the rear seat of a car buried in the sand 50 yards away. Head down, he scuttled over to us.

"Mr. arid Mrs. Groves?" After a pause to peer into our faces, he introduced himself tersely: "Quinton. Sam Quinton."

As he shook hands, his clawlike fingers examined the bones of my wrist and forearm. His sharp nose made circles in the air. He had the eyes of a nervous bird, forever searching the dunes and grass. An Army webbing belt hung around his patched black denims. He moved his hands restlessly in the air, as if

conducting a chamber ensemble hidden behind the sand hills, and I noticed his badly scarred palms. Huge weals formed pale stars in the darkness.

For a moment, he seemed disappointed by us, almost reluctant to move on. Then he set off at a brisk pace across the dunes, now and then leaving us to blunder about helplessly. Half an hour later, when we entered a shallow basin near a farm of alkali-settling beds, Judith and I were exhausted, dragging the suitcases over the broken tires and barbed wire.

A group of cabins had been dismantled from their original sites along the beach and re-erected in the basin. Isolated rooms tilted on the sloping sand, mantelpieces and flowered paper decorating the outer walls.

The basin was full of salvaged space material: sections of capsules, heat shields, antennas and parachute canisters. Near the dented hull of a weather satellite, two sallow-faced men in sheepskin jackets sat on a car seat. The older wore a frayed Air Force cap over his eyes. With his scarred hands, he was polishing the steel visor of a space helmet. The other, a young man with a faint beard hiding his mouth, watched us approach with the detached and neutral gaze of an undertaker.

We entered the largest of the cabins, two rooms taken off the rear of a beachhouse. Quinton lit a paraffin lamp. He pointed around the dingy interior. "You'll be... comfortable," he said without conviction. As Judith stared at him with unconcealed distaste, he added pointedly: "We don't get many visitors."

I put the suitcases on the metal bed. Judith walked into the kitchen and Quinton began to open the empty case.

"It's in here?"

I took the two packets of \$100 bills from my jacket. When I had handed them to him, I said: "The suitcase is for the... remains. Is it big enough?"

Quinton peered at me through the ruby light, as if baffled by our presence there. "You could have spared yourself the trouble. They've been up there a long time, Mr. Groves. After the impact" – for some reason, he cast a lewd eye in Judith's direction – "there might be enough for a chess set."

When he had gone, I went into the kitchen. Judith stood by the stove, hands on a carton of canned food. She was staring through the window at the metal salvage, refuse of the sky that still carried Robert Hamilton in its rusty centrifuge. For a moment, I had the feeling that the entire landscape of the earth was covered with rubbish and that here at Cape Kennedy, we had found its source.

I held her shoulders. "Judith, is there any point in this? Why don't we go back to Tampa? I could drive here in ten days' time when it's all over –"

She turned front me, her hands rubbing the suede where I had marked it. "Philip, I want to be here – no matter how unpleasant. Can't you understand?"

At midnight, when I finished making a small meal for us, she was standing on the concrete wall of the settling tank. The three relic hunters sitting on their car seats watched her without moving, scarred hands like flames in the darkness.

At three o'clock that morning, as we lay awake on the narrow bed, Valentina Prokrovna came down from the sky. Enthroned on a bier of burning aluminum 300 yards wide, she soared past on her final orbit. When I went out into the night air, the relic hunters had gone. From the rim of the settling tank, I watched them race away among the dunes, leaping like hares over the tires and wire.

I went back to the cabin. "Judith, she's coming down. Do you want to watch?"

Her blonde hair tied within a white towel, Judith lay on the bed, staring at the cracked plasterboard ceiling. Shortly after four o'clock, as I sat beside her, a phosphorescent light filled the hollow. There was the distant sound of explosions, muffled by the high wall of the dunes. Lights flared, followed by the noise of engines and sirens.

At dawn the relic hunters returned, scarred hands wrapped in makeshift bandages, dragging their booty with them.

After this melancholy rehearsal, Judith entered a period of sudden and unexpected activity. As if preparing the cabin for some visitor, she rehung the curtains and swept out the two rooms with meticulous care, even bringing herself to ask Quinton for a bottle of cleaner. For hours she sat at the dressing table, brushing and shaping her hair, trying out first one style and then another. I watched her feel the hollows of her cheeks,

searching for the contours of a face that had vanished 20 years ago. As she spoke about Robert Hamilton, she almost seemed worried that she would appear old to him. At other times, she referred to Robert as if he were a child, the son she and I had never been able to conceive since her miscarriage. These different roles followed one another like scenes in some private psychodrama. However, without knowing it, for years Judith and I had used Robert Hamilton for our own reasons. Waiting for him to land, and well aware that after this Judith would have no one to turn to except myself, I said nothing.

Meanwhile, the relic hunters worked on the fragments of Valentina Prokrovna's capsule: the blistered heat shield, the chassis of the radiotelemetry unit and several cans of film that recorded her collision and act of death (these, if still intact, would fetch the highest prices, films of horrific and dreamlike violence played in the underground cinemas of Los Angeles, London and Moscow). Passing the next cabin, I saw a tattered silver space suit spread-eagled on two automobile seats. Quinton and the relic hunters knelt beside it, their arms deep inside the legs and sleeves, gazing at me with the rapt and sensitive eyes of jewelers.

An hour before dawn, I was awakened by the sound of engines along the beach. In the darkness, the three relic hunters crouched by the settling tank, their pinched faces lit by the head lamps. A long convoy of trucks and half-tracks was moving into the launching ground. Soldiers jumped down from the tailboards, unloading tents and supplies.

"What are they doing?" I asked Quinton. "Are they looking for us?"

The old mail cupped a scarred hand over his eyes. "It's the Army," he said uncertainly. "Maneuvers, maybe. They haven't been here before like this."

"What about Hamilton?" I gripped his bony arm. "Are you sure —"

He pushed me away with a show of nervous temper. "We'll get him first. Don't worry, he'll be coming sooner than they think."

Two nights later, as Quinton prophesied, Robert Hamilton began his final descent. From the dunes near the settling tanks, we watched him emerge from the stars on his last run. Reflected in the windows of the buried cars, a thousand images of the capsule flared in the saw grass around us. Behind the satellite, a wide fan of silver spray opened in a phantom wake.

In the Army encampment by the gantries, there was a surge of activity. A blaze of head lamps crossed the concrete lanes. Since the arrival of these military units, it had become plain to me, if not to Quinton, that far from being on maneuvers, they were preparing for the landing of Robert Hamilton's capsule. A dozen half-tracks had been churning around the dunes, setting fire to the abandoned cabins and crushing the old car bodies. Platoons of soldiers were repairing the perimeter fence and replacing the sections of metaled road that the relic hunters had dismantled.

Shortly after midnight, at an elevation of 42 degrees in the northwest, between Lyra and Hercules, Robert Hamilton appeared for the last time. As Judith stood up and shouted into the night air, an immense blade of light cleft the sky. The expanding corona sped toward its like a gigantic signal flare, illuminating every fragment of the landscape.

"Mrs. Groves!" Quinton darted after Judith and pulled her down into the grass as she ran toward the approaching satellite. Three hundred yards away, the silhouette of a half-track stood out on an isolated dune, its feeble spotlights drowned by the glare.

With a low metallic sigh, the burning capsule of the dead astronaut soared over our heads, the vaporizing metal pouring from its hull. A few seconds later, as I shielded my eyes, an explosion of detonating sand rose from the ground behind me. A curtain of dust lifted into the darkening air like a vast specter of powdered bone. The sounds of the impact rolled across the dunes. Near the launching gantries, fires flickered where fragments of the capsule had landed. A pall of phosphorescing gas hung in the air, particles within it beading and winking.

Judith had gone, running after the relic hunters through the swerving spotlights. When I caught up with them, the last fires of the explosion were dying among the gantries. The capsule had landed near the old Atlas launching pads, forming a shallow crater 50 yards in diameter. The slopes were scattered with glowing particles, sparkling like fading eyes. Judith ran distraughtly up and down, searching the fragments of smoldering metal.

Someone struck my shoulder. Quinton and his men, hot ash on their scarred hands, ran past like a troop of madmen, eyes wild in the crazed night. As we darted away through the flaring spotlights, I looked back at the beach. The gantries were enveloped in a pale-silver sheen that hovered there and then moved away like a dying wraith over the sea.

At dawn, as the engines growled among the dunes, we collected the last remains of Robert Hamilton. The old man came into our cabin. As Judith watched from the kitchen, drying her hands on a towel, he gave me a cardboard shoe box.

I held the box in my hands. "Is this all you could get?"

"It's all there was. Look at them, if you want."

"That's all right. We'll be leaving in half an hour."

He shook his head. "Not now. They're all around. If you move, they'll find us."

He waited for me to open the shoe box, then grimaced and went out into the pale light.

We stayed for another four days, as the Army patrols searched the surrounding dunes. Day and night, the half-tracks lumbered among the wrecked cars and cabins. Once, as I watched with Quinton from a fallen water tower, a half-track and two jeeps came within 400 yards of the basin, held back only by the stench from the settling beds and the cracked concrete causeways.

During this time, Judith sat in the cabin, the shoe box on her lap. She said nothing to me, as if she had lost all interest in me and the salvage-filled hollow at Cape Kennedy. Mechanically, she combed her hair, making and remaking her face.

On the second day, I came in after helping Quinton bury the cabins to their windows in the sand. Judith was standing by the table.

The shoe box was open. In the center of the table lay a pile of charred sticks, as if she had tried to light a small fire. Then I realized what was there. As she stirred the ash with her fingers, gray flakes fell from the joints, revealing the bony points of a clutch of ribs, a right hand and shoulder blade.

She looked at me with puzzled eyes. "They're black," she said.

Holding her in my arms, I lay with her on the bed. A loud-speaker reverberated among the dunes, fragments of the amplified commands drumming at the panes.

When they moved away, Judith said: "We can go now."

"In a little while, when it's clear. What about these?"

"Bury them. Anywhere, it doesn't matter." She seemed calm at last, giving me a brief smile, as if to agree that this grim charade was at last over.

Yet, when I had packed the bones into the shoe box, scraping up Robert Hamilton's ash with a dessertspoon, she kept it with her, carrying it into the kitchen while she prepared our meals.

It was on the third day that we fell ill.

After a long, noise-filled night, I found Judith sitting in front of the mirror, combing thick clumps of hair from her scalp. Her mouth was open, as if her lips were stained with acid. As she dusted the loose hair from her lap, I was struck by the leprous whiteness of her face.

Standing up with an effort, I walked listlessly into the kitchen and stared at the saucepan of cold coffee. A sense of indefinable exhaustion had come over me, as if the bones in my body had softened and lost their rigidity. On the lapels of my jacket, loose hair lay like spinning waste.

"Philip..." Judith swayed toward me. "Do you feel – What is it?"

"The water." I poured the coffee into the sink and massaged my throat. "It must be fouled."

"Can we leave?" She put a hand up to her forehead. Her brittle nails brought down a handful of frayed ash hair. "Philip, for God's sake – I'm losing all my hair!"

Neither of us was able to eat. After forcing myself through a few slices of cold meat, I went out and vomited behind the cabin.

Quinton and his men were crouched by the wall of the settling tank. As I walked toward them, steadying myself against the hull of the weather satellite, Quinton came down. When I told him that the water supplies were contaminated, he stared at me with his hard bird's eyes.

Half an hour later, they were gone.

The next day, our last there, we were worse. Judith lay on the bed, shivering in her jacket, the shoe box held in one hand. I spent hours searching for fresh water in the cabins. Exhausted, I could barely cross the sandy basin. The Army patrols were closer. By now, I could hear the hard gear changes of the half-tracks. The sounds from the loud-speakers drummed like fists on my head.

Then, as I looked down at Judith from the cabin doorway, a few words stuck for a moment in my mind.

"...contaminated area... evacuate... radioactive..."

I walked forward and pulled the box from Judith's hands.

"Philip..." She looked up at me weakly. "Give it back to me."

Her face was a puffy mask. On her wrists, white flecks were forming. Her left hand reached toward me like the claw of a cadaver.

I shook the box with blunted anger. The bones rattled inside. "For God's sake, it's *this*! Don't you see – why we're ill?"

"Philip – where are the others? The old man. Get them to help you."

"They've gone. They went yesterday, I told you." I let the box fall onto the table. The lid broke off, spilling the ribs tied together like a bundle of firewood. "Quinton knew what was happening – why the Army is here. They're trying to warn us."

"What do you mean?" Judith sat up, the focus of her eyes sustained only by a continuous effort. "Don't let them take Robert. Bury him here somewhere. We'll come back later."

"Judith!" I bent over the bed and shouted hoarsely at her. "Don't you realize – there was a *bomb* on board! Robert Hamilton was carrying an atomic weapon!" I pulled back the curtains from the window. "My God, what a joke. For twenty years, I put up with him because I couldn't ever be really sure..."

"Philip..."

"Don't worry, I used him – thinking about him was the only thing that kept us going. And all the time, he was waiting up there to pay us back!"

There was a rumble of exhaust outside. A half-track with red crosses on its doors and hood had reached the edge of the basin. Two men in vinyl suits jumped down, counters raised in front of them.

"Judith, before we go, tell me... I never asked you –"

Judith was sitting up, touching the hair on her pillow. One half of her scalp was almost bald. She stared at her weak hands with their silvering skin. On her face was an expression I had never seen before, the dumb anger of betrayal.

As she looked at me, and at the bones scattered across the table, I knew my answer.